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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/404,704	09/23/1999	TOMOAKI HOKAO	12994	8700

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EXAMINER

NGUYEN, DUNG X

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 05/07/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/404,704

Applicant(s)

HOKAO, TOMOAKI

Examiner

Dung X Nguyen

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 1999.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2 - 35, and 37 - 64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2 - 10, 23 - 24, 30, 32, 34, 37 - 45, 55, and 56 is/are rejected.
- 7) ☒ Claim(s) 11 - 22, 25 - 29, 31, 33, 35, 46 - 54, and 57 - 64 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Response to Arguments***

1. Applicant's arguments filed on February 27, 2003, have been fully considered but are moot in view of the new ground(s) of rejection. The examiner regrets for the statements for Allowance Subject Matter in the Office Action filed on November 20, 2002, particularly on claims 9, 10, 23, 24, 30, 32, 34, 44, 45, 55, and 56, for late discovery. Claims 1 and 36 have been cancelled. Claim 64 has been added.

There is a discrepancy in Applicant's amendment filed on February 27, 2003 that there is a change to overcome the rejections under 35 U.S.C. 112 on page 10, but there are not changed in the claims.

***Specification***

2. The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper, as the certified translation of the Foreign Priority claimed has not received. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

3. In claim 38, line 10, the word "ain" has no meaning. Is it "in"?

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

*The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.*

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5. **Claims 2 - 8, 30, and 37 - 43 are rejected** under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 2 - 8, on lines 7-8, the statement of "based on whether or not a speech signal or data is contained in the signal received by the antenna and the radio unit" makes the reader to confuse about there is a speech signal or data.

Regarding claim 30, the dependent claim is depended on the cancelled claim.

Regarding claims 37 - 43, on lines 6-7, the statement of "based on whether or not a speech signal or data is contained in the signal received by the antenna and the radio unit" makes the reader to confuse about there is a speech signal or data.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

7. **Claims 9, 10, 32, 44, and 45 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Honda (US patent # 5,970,084), and further in view of Iwakiri (US patent # 5,889,815).

Regarding claim 9, Honda discloses (figure 1 and column 5, line 20 to column 6, line 2):

- Antenna 1 and high-frequency circuitry 2 for receiving a signal;

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- Finger receivers 4, 9, and 14 for inverse calculations the signal received by the antenna 1 and high-frequency circuit 2;
- Synthesizer 20 for synthesizing signals from the finger receivers;
- Detector 21 for detecting an error of output signal of the synthesizer 20;
- Control section 22 for controlling power on and off of the finger receivers based on the measurement and detection results of the power measure 19 and the error detector 21.

Honda differs from the instant claimed invention that it does not teach a means for controlling a number of finger receivers based on whether a speech signal or data is contained in the received signal. However, Iwakiri discloses a control part, which controls the plurality of fingers on the basis of channel state (speech) and orthogonal channel allocation (high-data-rate data) information (column 2, line 61 to column 3, line 57). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement Iwakiri into Honda to save the consumed power.

Regarding claim 10, Iwakiri further discloses the operation of all finger receivers based on the channel information (column 4, lines 7 – 11).

Regarding claim 32, Honda discloses a mobile communication receiver (abstract).

Regarding claim 44, the limitations are analyzed in the same manner set forth as claim 9.

Regarding claim 45, the limitations are analyzed in the same manner set forth as claim 10.

8. **Claims 23, 24, 34, 55, and 56 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Ito (US patent # 6,408,039), and further in view of Iwakiri (US patent # 5,889,815) as there is no certified translation of the Foreign Priority claimed.

Regarding claim 23, Ito discloses (figure 10):

- Antenna and Radio for receiving data (column 9, lines 16 – 18 and column 3, lines 13 – 23);

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- A plurality of searchers/fingers (11, 12, 13, 14, 15, 16) for detecting the received data from antenna and radio unit with respective multiple paths;
- A synthesizer 18 for combining signals by searchers/fingers 11-16;
- A decoder 19 for decoding the data synthesized by synthesizer 18 (it would have been obvious to one of ordinary skill in the art at the time of the invention was made to recognize that there is an encoder within the signal processor);
- Detector 17A1 analyzes the signal strengths of the finger symbols (column 9, lines 29 – 31);
- Controller 17A3 for controlling searchers/fingers 11-16 according their signal strengths from detector 17A1 (column 10, lines 20 – 23).

Ito differs from the instant claimed invention that it does not teach a means for controlling a number of finger receivers based on whether a speech signal or data is contained in the received signal. However, Iwakiri discloses a control part, which controls the plurality of fingers on the basis of channel state (speech) and orthogonal channel allocation (high-data-rate data) information (column 2, line 61 to column 3, line 57). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement Iwakiri into Ito to save the consumed power.

Regarding claim 24, Iwakiri further discloses the operation of all finger receivers based on the channel information (column 4, lines 7 – 11).

Regarding claim 34, Ito and Iwakiri differ from the instant claimed invention that they do not state that the receiving circuit being a mobile terminal. However, the mobile terminal is just a part of communication. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use Iwakiri and Ito to state that the receiving circuit being a mobile terminal for completing the communication systems.

Regarding claim 55, the limitations are analyzed in the same manner set forth as claim 23.

Regarding claim 56, the limitations are analyzed in the same manner set forth as claim 24.

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***Allowable Subject Matter***

9. **Claims 11 – 22, 25 – 29, 31, 33, 35, 46 – 54, and 57 -64 are objected** to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Contact Information***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung X. Nguyen whose telephone number is (703) 305-4892. The examiner can normally be reached on Monday through Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Chi Pham can be reached on (703) 305-4378. The fax number for this group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

DXN  
April 25, 2003



**DON N. VO  
PRIMARY EXAMINER**